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## **ABSTRACT**

A system and a method for receiving and transmitting information in a multipath environment provide a wireless communications system. The wireless communications system provides a switching module that is adapted to couple a receiver module to either a first antenna or a second antenna as a function of reception characteristics of the first antenna and the second antenna. The switching module is also adapted to couple a transmitter module to the either the first antenna or the second antenna as a function of transmission characteristics of the first antenna and the second antenna.